

Shahram Tahmasseby, Ph.D., P.Eng.

Doha, Qatar, Phone: 33 44 0514, Email: tahmassebi@gmail.com

Total years of experience: 21

Key qualifications

I am a professional Transportation Engineer and ITS expert with a variety of international expertise in traffic engineering and transportation planning i.e. TIS, ITS, Rail Bound Transit Operation (LRT, Tram), Dynamic Incident Management, Road Safety, Concept Design of Urban Transport Networks, Development Plan review (DPR), Public Transportation, Peer-To-Peer Real-Time Ridesharing Applications, Emerging Transit Technologies, and Logistics and Freight Transportation Modeling and Analysis.

A wide range of experiences in different industries and the most advanced applications such as EMME, PTV VISUM (macroscopic traffic simulation), PARAMICS (mesoscopic modeling), PTV VISSIM (microscopic traffic simulation), PTV VISWALK (active modes i.e. pedestrian/cyclist modeling), TOMTOM Traffic Stats and Custom Area Analysis, and INRIX Analytics Tool.

Contribution to several seminars and conferences related to various civil engineering, and transportation engineering e.g. CITE, ITE, ETC, TRB, ITS World Congress, TAC, CSCE, NACTO.

Employment Record

2019- Present	Research Associate- QTTSC- Qatar University
2019-2019	Senior Project Manager (Transport)- K&A- Qatar
2018 -2019	Senior Project Manager (Transport)- KEO- Qatar
2013- 2017	Transportation Systems Engineer - The City of Calgary
2012-2013	PostDoc Fellow, The University of Calgary
2009-2012	Principal Transport Economist and Policy Analyst – Ecorys Nederland
2005-2009	Ph.D./Research Associate (Transportation Planning and Engineering) at Delft University of Technology
2004-2005	Traffic Engineer and Transport Planner in Halcrow (Middle East)
2000-2004	Transport/infrastructure Project Manager in TTO-TCTTS Company (IRAN)

Education

- **Post-Doctorate in Transportation Engineering**, University of Calgary, 2012- 2013
- **Ph.D. in Transportation Engineering**, Delft University of Technology, 2005- 2009
- **MSc. in Transportation Engineering**, Sharif University of Technology, 1998-. 2001
- **B.Sc. in Civil Engineering**, University of Tehran, 1993- 1998

Software skills:

- EMME3, VISUM, VISSIM, VISWALK, OPTIMA, PARAMICS, SCATS, TOMTOM, INRIX, OPENTRACK, SYNCHRO, SIDRA, SPSS, GAUSS, MATLAB, STATA, MS OFFICE

Notable projects:

2019- Onwards:

1. Development of a Mobility-as-a-Service (MaaS) Ecosystem with Qatar's Context (NPRP)
2. Consultancy for KATARVA Village Traffic Impact Study TIS
3. Vehicle restraint systems (VRS) evaluation and audit in the State of Qatar
4. Feasibility study for the implementation of an aerial gondola over Doha Bay
5. Traffic Impact Assessment (TIA) for Al Rayyan Stadium hosting FIFA World Cup 2022.

CURRICULUM VITAE- Dr. Shahram Tahmasseby (2022)

2019, K&A, Doha, Qatar:

1. Update of GCC Railway Passenger & Freight Traffic Forecasts- Advice on Data Requirement.
2. Advice on Al Bayt Stadium Access Development - Transportation Strategy (Client: SCDL)

2018-2019, KEO, Doha, Qatar:

1. **Traffic Impact Study(TIS)** for Qatar Petroleum District, Al Rayyan Stadium, Qatar University (CMHS), Mall of Qatar Phase 2
2. **Concept Design** for an Expressway Connecting Lusail to Doha
3. **Traffic Survey and Parking Study** for Lusail City, and Mall of Qatar in Al Rayyan Qatar

2012- 2017, The City of Calgary, Alberta, Canada,

1. Design and implement studies, monitor trends, and analyze data relating to vehicular, transit, and pedestrian travel - Calgary
2. Project management: the creation of an online platform for public access to the transportation data
3. Implementation of MIOVISION for traffic survey: traffic data collection and traffic signal operations- TMC, ATC
4. Comparison of the viability of personal rapid transit (PRT) feeder system and an urban gondola system application linking the university of Calgary with its surrounding major activity centers (by PTV VISUM, VISSIM & VISWALK)
5. Model and assess the benefits of connected vehicle initiative in a micro-simulation environment, (by PARAMICS)
6. Examining the impact of route optimization on greenhouse gas emissions in construction of transportation infrastructure – case study: Ajax, Ontario (by VISSIM)
7. Evaluating impacts of social web-based networks on ridesharing, case study: Calgary, Alberta (by SPSS and GAUSS)
8. Stationary sensors data versus TOMTOM floating car data, measuring travel time reliability along freight transportation corridors in the city of Calgary, Alberta, a comparative study
9. Utilisation of existing ITERIS and ALDIS traffic cameras in the city of Calgary for traffic count purposes
10. Research: autonomous vehicles, implications for travel behaviour, smart infrastructure, land-use change, and commercial vehicle operations
11. Accuracy assessment of bike and pedestrian counting systems via MIOVISION versus Eco-Counter, a comparative study for a recreational bridge in downtown Calgary
12. Travel time inventory project: how to mitigate satellite shadow for vehicles speed measurement in North American cities downtown core using the GLONASS tracking technology (TRIMBLE): a preliminary study
13. Implementation of TRAFFICVISION as virtual count station inside an airport tunnel and utilizing PTZ cameras for counting purposes
14. Calculating travel time reliability metrics on Calgary goods movement corridors using TOMTOM traffic stats portal
15. Conducting a comparative study between TOMTOM, INRIX, and CELLINT regarding crowdsource based historical travel time in Canada
16. Performance analysis of STRAVA and BRISK cycle analytics: running and cycling GPS tracker in Canada
17. Conducting accuracy verification and implementation of magnetometer as counting stations from SENSYS networks
18. Managing and designing pedestrian and bicycle volume data collection program in the City of Calgary, AB.

CURRICULUM VITAE- Dr. Shahram Tahmasseby (2022)

19. Identification of problematic locations along LRT routes via crowdsourcing in Calgary, Canada
20. Implementation a comprehensive traffic count database system (TES) for Transportation Data Division – The City of Calgary
21. Conducting traffic impact studies and traffic incident impacts assessments using crowdsourcing techniques (INRIX)

2009- 2012 ECORYS Nederland, The Netherlands

1. An economic evaluation of transit projects financed by the European Investment Bank
2. Cairo traffic congestion study project, (phase i and ii) (**A World Bank project**)
3. Innovation, transport and labour market policy practices (**INTRALAB**): the balance between sectoral and integrated approaches and the involvement of sub national levels
4. Almaty Electrotrans – a corporate development project to support the city of Almaty in implementing urban transport sector reform and addressing the remaining challenges in the sector, (**an EBRD project**)
5. Punjab state road sector project; **a Road Asset Management project**
6. Scenarios and drivers for sustainable growth from the oceans, seas and coasts, the European Commission, **DG MARE, EU**
7. **Marco Polo Programme**: explore motorways of the sea (MoS) policy to include the provision of the necessary port and land infrastructure to the European ports
8. Research activities to address key technologies and policies of the logistic chains to improve the global performance of multimodal transportation in EU
9. Develop sustainability indices to support intermodal initiatives and solutions in order to alleviate road traffic congestion in main European intercity corridors

2005-2009: Doctoral Study, Delft University of Technology, The Netherlands

1. Improving reliability, and operational performance in public transport networks
2. NS rail re-scheduling to improve operating performance and schedule adherence (by OPENTRACK)
3. Dynamic LRT incident management in the City of The Hague
4. Bike and ride planning for the Town of Delft in the Netherlands
5. Tram lines network modification in the City of The Hague to improve transit system operation performance
6. Feasibility study of a park and ride transport facility in the Town of Delft to reduce traffic congestion nearby the train station

2001-2005: Middle East

Development of Dubai and Sharjah travel demand forecasting models

- Comprehensive traffic and transportation studies in the Emirate of Sharjah
- Traffic impact assessment in DIFC (Dubai international financial center), Dubai Land Residence, Knowledge Village, and IMPZ
- Modeling traveler's mode and destination choice behaviour in the City of Mashhad, Iran (1999-2001)
- Development of the City of Tehran travel demand forecasting model

Memberships:

- ITE, Institute of Transportation Engineers
- APEGA, The Association of Professional Engineers and Geoscientists of Alberta- **Licensee**

Grants:

- NSERC
- NPRP Standard – QNRF

PUBLICATIONS

1. AH Alkhereibi, S Tahmasseby, S Mohammed, D Muley (2021), Blue collar laborers' travel pattern recognition: Machine learning classifier approach - *Transportation Research Interdisciplinary Perspectives*
2. Tahmasseby, S., & Reddipalayam Palaniappan Subramanian, P. (2021). Traffic Impact Assessment for the Stadiums Hosting FIFA 2022 World Cup in Qatar: A Case Study. *Iranian Journal of Science and Technology, Transactions of Civil Engineering*, 1-12.
3. Tahmasseby, S., Muley, D, and Bernd. W. (2021) Performance Evaluation of Vehicle Restraint Systems in the Context of Design and Installation, *Civil Engineering Journal*, Vol 7(3). Pp449- 460. 10.28991/cej-2021-03091665
4. Tahmasseby, S. (2021). Aerial Ropeway System Feasibility Study In Doha, Qatar, *Journal of Unmanned Vehicle Systems*. Vol.9. No2. PP.92-111. <http://dx.doi.org/10.1139/juvs-2020-0028>
5. Tahmasseby, S. (2017). Travel Time Reliability Study in Calgary Using the Crowdsourcing Technique, In Proceedings of *ITS World Congress*, Montreal, Canada
6. Tahmasseby, S., L. Kattan, and B. Barbour. (2015). Propensity To Participate In A Peer-To-Peer Social-Network-Based Carpooling System. *Journal of Advanced Transportation*.
7. Tahmasseby, S. (2015). Traffic Data: Bluetooth Sensors vs. Crowdsourcing, A Comparative Study to Calculate Travel Time Reliability in Calgary, Canada, *Journal of Traffic and Transportation Engineering Vol. 3* (2015)
7. Tahmasseby, S. and L. Kattan, (2015), Preliminary economic appraisal of personal rapid transit and urban gondola feeder systems serving a university campus and its surrounding major attractions. *Canadian Journal of Civil Engineering*, Vol 42, pp.1-13.
8. Tahmasseby, S. (2014), Stationary Sensors Data Versus Floating Car Data, Measuring Travel Time Reliability Along Freight Transportation Corridors in The City Of Calgary, Alberta, A Comparative Study. In Proceedings of *European Transport Conference*, October 2014, Frankfurt , Germany
9. Tahmasseby, S., and Kattan, L., (2014), Barbour B. Market Demand Study Of A Social-Network Based Dynamic Peer-To-Peer Real Time Ridesharing System At The University Of Calgary Main Campus. In proceedings of the *93rd Annual Meeting of the Transportation Research Board (TRB)*, January 2014, Washington DC.
10. Tahmasseby, S., and Kattan, L., de Barros, A. Investigating Impacts of Transit Accessibility and Teenage Social Activities on Young Drivers' Licensing Decision In Alberta, Canada. *TAC*, Edmonton, Canada
11. Tahmasseby, S., and Kattan, L. (2013). Investigating economic viability of a personal rapid transit system (PRT) in a university campus and its surroundings, *Proceedings of 92nd Annual Meeting of the Transportation Research Board (TRB)*, January 2013, Washington DC.
12. Paikari, E., Kattan, L., Tahmasseby. S., and Far, B.H. (2013) Modeling and simulation of advisory speed and re-routing strategies in connected vehicles systems for crash risk and travel time reduction. Proceedings of the *2013 Canadian Conference on Electrical and Computer Engineering*, Regina, Saskatchewan, Canada.
13. Amiri. M., Sadeghpour. F., and Tahmasseby.S. (2013). The Impact of Route Optimization on Greenhouse Gas Emissions in Construction Transportation. Proceedings of the *2013 Canadian Society for Civil Engineering (CSCE)*, Montreal, Canada.

CURRICULUM VITAE- Dr. Shahram Tahmasseby (2022)

14. Tahmasseby, S. (2011). Stochastic Perspective in Urban Rail Transit Assessment, Consequences for Transit Network Design. Proceedings of *90th Annual Meeting of the Transportation Research Board (TRB)*, January 2011, Washington DC.
15. Tahmasseby, S., R. Van Nes (2010), Improving service reliability in urban transit networks, In *Proceedings European Transport Conference 2010*, October 2010, Glasgow, Scotland, UK
16. Tahmasseby, S. (2009). Reliability in Urban Public Transport Network Assessment and Design. Transport and Planning Department. Delft University of Technology. Ph.D. Thesis. TRAIL Thesis Series No. T2009/6 (the publication resulted from work done in the process of completing doctoral degree)
17. Tahmasseby, S. & R. Van Nes. (2009). Improving service reliability in urban public transport networks. In the Proceedings of *the International Conference on Models and Technologies for Intelligent Transportation Systems*. June 2009, Roma, Italy. (international; the publication resulted from work done in the process of completing doctoral degree)
18. Tahmasseby, S., R. van Nes, & N.Van Oort. (2009). Reliability assessment of urban rail transit networks, Methodology & Case study, Proceedings of *88th Annual Meeting of the Transportation Research Board (TRB)*, January 2009, Washington DC. (international; the publication resulted from work done in the process of completing doctoral degree)
19. Tahmasseby, S., & R. van Nes. (2008). Impacts of infrastructure on reliability of urban rail public transport networks, Proceedings of *14th international conference on Urban Transport 2008*, Malta. (international; the publication resulted from work done in the process of completing doctoral degree)
20. Tahmasseby, S., & R. van Nes, (2008). The role of infrastructure on public transport service reliability, Proceedings of *3rd Kumho-Nectar Conference*, July 2008, Amsterdam. (international; the publication resulted from work done in the process of completing doctoral degree)
21. Tahmasseby, S., & R. van Nes. (2007). Robustness of Urban Public Transport Networks, *Proceedings 13th international conference on Urban Transport 2007*, September 2007, Coimbra, Portugal (international; the publication resulted from work done in the process of completing doctoral degree)
22. Tahmasseby, S., R. van Nes, and N.van Oort. (2007). Public Transport Network Design and Reliability, *The 3rd International Symposium on Transportation Network Reliability (INSTR2007)*, 2007, The Hague, NL. (international; the publication resulted from work done in the process of completing doctoral degree)
23. Van Nes, R., S. Tahmasseby, and P. de Jong. (2006). Robustness of Transport Service Networks, Effects of Infrastructure Availability, CD-ROM 9th TRAIL-congress : Trail in Motion, Trail Research School, 2006, Delft , NL (National; the publication resulted from work done in the process of completing doctoral degree)
24. Tahmasseby, S, and M. Kermanshah. (2002). Simultaneous and Recursive Mode-Destination Choice Models, Comparative Study, Proceedings *6th International Civil Engineering Conference- Isfahan University of Technology*, 2002, Isfahan, Iran. (international; the publication resulted from work done in the process of completing master's degree)